

9th Consulting Engineers of Alberta

Young Professionals' Conference 2023

Complex World, Simple Solutions

Thursday, April 27 and Friday, April 28

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Agenda

Thursday, April 27

Time	Topic
5:00 PM	Registration Opens
6:15 PM	Keynote Speaker: Reverse Engineer Your Goals & Skyrocket Your Results Lori-Ann Muenzer, Business Results & Mindset Coach, Canada's 1st Olympic Cycling Gold Medalist, 2X Olympian, Keynote Speaker & Author Dinner and Networking to follow

Friday, April 28

Time	Topic
7:15 AM - 8:00 AM	Registration and Breakfast
8:00 AM - 8:15 AM	Opening Remarks and Welcome
8:15 AM - 10:00 AM	The Intangible Emotional Intelligence Factor Hardly Anybody Comprehends Lisa Brown, B.A., M.A., Top trainer at the University of Calgary's Management Development Program for Continuing Education for over 25 years
10:00 AM - 10:15 AM	Coffee Break
10:15 AM - 12:00 PM	Risk Management - Standard of Care in Contracts and Engineering (Panel Presentation) Magdalena Cammidge, CIP, CCIB, CRM, Senior Advisor, Partner Lloyd Sadd Michael Markowski, P.Eng., Director of Risk and Commercial Management DIALOG Yves Cormier, P.Eng., PMP, Vice-President, Risk Management Englobe
12:00 PM - 1:15 PM	Lunch
1:15 PM - 2:00 PM	History and Future of Computational Tools Dr. Sameer Adeeb, Ph.D., P.Eng., Professor and Interim Chair Civil and Environmental Engineering, School of Mining and Petroleum Engineering University of Alberta with Daren Trinh and Weichin Qiu
2:00 PM - 2:45 PM	Drones and Autonomy Hanh N. Hong, M.Sc., P.Eng., Senior Geotechnical Engineer AECOM Steaphan MacAulay, VP Transportation & Infrastructure & Nathan Mayer, P.Eng., Remote Sensing Geomatics Technician Global Raymac Surveys
2:45 PM - 3:00 PM	Coffee Break
3:00 PM - 4:30 PM	Continuously Improving You and Your Organization Dr. Lianne Lefsrud, Ph.D., P.Eng., Associate Professor and Director Outreach, Chemical and Materials Engineering University of Alberta
4:30 PM	Closing Remarks



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5:00 PM

Registration Opens

6:15 PM

Keynote: Reverse Engineer Your Goals & Skyrocket Your Results

YP Host: Brett Kruger

FACT: 90% OF BUSINESSES, TEAMS AND EMPLOYEES FAIL TO REACH THEIR GOALS AND GET THE RESULTS THEY WANT

Why is this?

Two reasons.

First, the majority of people set the wrong type of goals for their departments and businesses.

Second, they work on their to do lists instead of focusing on goal achieving actions. In this session you will learn how to navigate our constantly changing economy and thrive instead of just survive.

Learn how to convert challenges, obstacles, and adversity by bridging the gap from where you are to where you want to be and skyrocket your results.

Explore the powerful and transformational mindset used by Olympians.

Apply it immediately in your business (and personal life) to create the results you truly want.

Lori-Ann Muenzer, *Business Results & Mindset Coach, Canada's 1st Olympic Cycling Gold Medallist, 2X Olympian, Keynote Speaker & Author*

Lori-Ann won Canada's 1st Olympic Cycling Gold Medal because of her Mindset --she was 38 years old, worked F/T, and raced against competitors half her age.

Now a World-Class Business Results & Mindset Coach, Lori-Ann teaches and mentors entrepreneurs and business owners how to **THINK & GET RESULTS** just like an Olympic Gold Medalist for your own profession.

She is known for her energetic and powerful winning results, teaching her clients to take consistent action, and a simplicity approach to thinking and goal achievement. Lori-Ann helps businesses, teams and employees achieve breakthrough results in record time.



Lori-Ann is a 2X Olympian, keynote speaker, published author, and has worked in the legal, aerospace, and energy sectors. She calls Edmonton home, teaches weekly virtual indoor cycling classes in the fall and winter, and still loves riding her bicycle 3 days a week.

Building Better Communities



Associated Engineering is a Canadian, employee-owned consulting firm specializing in planning, engineering, environmental science, and landscape architecture. Our approach is to collaborate with our clients to create sustainable and resilient solutions, improve the environment, and shape a better future for all of us.



8:00 AM - 8:15 AM

Opening Remarks and Welcome

Jason Maurer, CEA Vice President
YP Host: Sarbjot Singh

8:15 AM - 10:00 AM

The Intangible Emotional Intelligence Factor Hardly Anybody Comprehends

YP Host: Sarbjot Singh

If you isolate ONE THING about high achievers—the one thing that has put them at the peak of success above anything and everything else—it is their inner game. Their inner emotional intelligence leads to genuine courage.

I'm not talking about traditional 'save a child from a burning building' courage. I'm talking about the Courage to Win®: the power to take action on your dreams and believe in your inherent worth despite fear, rejection, failure or intimidation. It's the ability to stay in control and triumph when facing setbacks, loss, disappointment, and challenges.

Those who possess this precious intangible know how to start from ground zero and build a lifetime of joy, fulfillment and true greatness against all odds.

"Tell me how you master fear, and I'll predict your success in career, love, and money forever."

How? By uncovering the unique 'courage formula' in your unconscious mind.

Each of us has a unique 'courage formula' programmed into our unconscious, and this formula dictates our success and happiness above all other factors.

Friday, April 28 | Program

That's why you can be very skilled, talented, and educated, but if your 'courage formula' is not fine-tuned, then happiness and success will elude you (no matter how hard you work).

Fortunately, you can quickly re-program your 'courage formula' to generate automatic self-mastery and success in all that matters to you. This is the essence of emotional intelligence.

When you gain the Courage to Win[®], here's some of what you can expect. You will...

- Wake up in the morning with unceasing energy and happiness, excited to tackle the day ahead
- Smash through your self-limiting mindset and beliefs
- Be an influential, charismatic leader who gets respect, appreciation, and cooperation from the key people in your life
- Feel in control of your emotional life because you can empower yourself no matter what's happening to you
- Create unstoppable confidence and perform flawlessly in pressure situations including presentations, meetings, and interviews
- Cast off destructive mental habits such as people-pleasing and perfectionism and enjoy genuine self-acceptance

Lisa Brown, B.A., M.A.

Lisa Lane Brown is the world's leading personal success coach using the power of the Courage to Win.[®] She is famous for helping people create success and unconditional happiness fast, without superficial self-help or never-ending therapy. Entrepreneur Magazine called the Courage to Win book, "A straightforward guide to success, highly recommended."

A 3-time World Champion in her sport, Lisa has worked with over 7,652 executives, Olympic athletes, and high achievers in over 34 countries to help them reach their goals.



10:15 AM - 12:00 PM

Risk Management: Standard of Care in Contracts and Engineering Panel

YP Moderators: Lucas Green and Victoria Buffam

As young professionals, risk is inherent in every process of our jobs. Contractual risk, safety risks, engineering risks, all make up portions of our day-to-day work. It is up to us to manage the risk we take on appropriately, to levels that are acceptable to ourselves and our firms. This panel will discuss ways we can balance risk in our careers, keeping risk to levels as low as reasonably possible, and how to tackle issues and problems that arise.

Magdalena Cammidge, CIP, CCIB, CRM

Magdalena joined Lloyd Sadd in 2005, bringing with her varied and extensive experience in commercial insurance. She has been in the industry since 2000, working on complex commercial accounts in large brokerage firms. Her role includes gaining an intimate understanding of the clients' business and working with them to create effective Risk Management solutions, ultimately helping clients build stronger businesses. Magdalena leads the Design Professionals Practice at Lloyd Sadd and works exclusively with Consulting firms focusing on ways to help manage and mitigate their unique liability risks.



Apart from English, Magdalena speaks Polish, and she has lived in Switzerland and Poland before coming to Canada. Causes Magdalena supports include families and children, fine arts for children's development, and mental health. She spends her free time oil painting, silversmithing, hiking, biking, skiing and traveling.



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Michael Markowski, P.Eng.



Michael was born and raised in Edmonton and completed his Civil Engineering degree at the University of Alberta. Following graduation, he took on increasing leadership roles for a general contractor, participating in variety of complex projects including the Terwillegar Park Footbridge, Saskatchewan Hospital North Battleford P3, Snye Park Redevelopment and the 100th Street Funicular. Through his career he gravitated to projects where he could work closely with the design consultant and through that experience saw that the design industry has a strong influence in project success, but was also

being asked to take on risks that were beyond its capacity to manage. Michael joined DIALOG Design in the role of Director of Risk and Commercial Management in early 2021, supporting the practice in risk assessment in agreements, project management principles and commercial matters. Michael believes in the old school foundations of trust and communication to promote project success and mitigate risk.

Yves Cormier, P.Eng., PMP

Yves obtained his Bachelor of Applied Sciences (civil engineering) from the University of Moncton, in Moncton, NB, and is a proud member of APEGA and the Project Management Institute.

Yves began his career working for J.D. Irving and then joined Jacques Whitford, a consulting firm that was eventually acquired by Stantec. He has nearly 30 years experience in the Canadian consulting engineering industry. As a geotechnical engineer, he has worked on a broad range of projects across Canada and parts of the United States in various sectors, including all levels of government, oil & gas, industrial, mining, transportation, and land development. Yves' most recent technical work included managing multi-disciplinary project teams as well as being the geotechnical discipline lead for alternate delivery model projects (e.g., P3).



Yves joined Englobe in 2021 and is currently Vice-President, Risk Management. Yves is responsible for developing mitigation strategies for operational risks linked to project delivery, including Health & Safety and is directly involved with bid reviews, project reviews, claims management and due diligence of potential acquisitions.

1:15 PM - 2:00 PM

History and Future of Computational Tools

YP Host: Aidan Cooper

Innovation in the engineering industry can take many forms. An example of this is recognizing tasks in your daily work that could be improved that not only benefit yourself and your company, but the industry as a whole. There is often resistance to new innovations, but these can be overcome with persistence.

In this presentation Samer Adeeb, PhD, PEng and his Students will take us on a journey of engineering calculations, from the humble calculator he used in the 1990s, to a Python Cloud based platform tailor made for engineering applications. Samer recognized the trajectory and changes of the technology throughout his career, and extrapolated it for the future, developing his own company.

Dr. Samer Adeeb, Ph.D., P.Eng.

Dr. Samer Adeeb is a professor in Civil and Environmental Engineering whose main area of expertise is numerical modelling using the finite element analysis method for biomedical engineering and pipeline applications.

In 2004, Dr. Adeeb started a position at TransCanada Pipelines in the technical support and technology management department where he worked for two and a half years on various pipeline research and development projects. He joined the University of Alberta as an assistant professor in 2007.



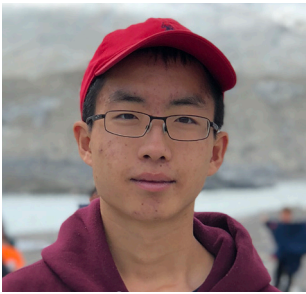
Over the years, his research team investigated several research projects that focused primarily on developing reliable models for predicting the mechanical behaviour of new and vintage pipelines in various operational conditions. The models are used by the industry collaborators to inform the integrity decisions for pipelines subjected to ground movement and associated with dents and other mechanical aberrations. Dr. Adeeb has served as the interim chair for the Civil and Environmental Engineering department, the associate chair for research and planning for one year, and as the associate chair of undergraduate studies for two years.

Daren Trinh

Daren Trinh is a 5th year electrical engineering student at the University of Alberta. He has an interest in business and engineering and has previously done an internship at Edmonton based Space Startup Wyvern Inc. As the CMO of MecSimCalc, Daren works on marketing, hackathons, analytics, pitches, business plans and outreach to further expand the user base of MecSimCalc.



Weichen Qiu



The CTO of MecSimCalc, Weichen Qiu is a 5th year undergraduate student in Computer Engineering at the University of Alberta. He has experience in web development and has interned with companies such as Huawei and DriveWyze.



Leading with Science[®] to improve people's lives

Tetra Tech's innovative, sustainable solutions help our clients reach their goals for water, environment, infrastructure, resource management, energy, and international development projects.



2:00 PM – 2:45 PM

Drones and Autonomy

YP Host: Aidan Cooper

The emerging discipline of UAVs in the engineering and consulting world is nothing new. In fact, drones have been used for surveying applications since the early 2000s. However, technological and regulatory limitations have prevented drones from being utilized to their full potential until more recently. Now, sophisticated UAV technology is not only widely accessible, but very profitable for many engineering and consulting firms across Alberta. Drones allow engineers and land surveyors to gather data across vast and remote areas with high accuracy and efficiency without the costs and safety risks of sending out crews with traditional GPS survey equipment. Surveying with drones is only the tip of the iceberg, and many other applications for UAVs such as construction inspection, 3D mapping, and aerial imagery are emerging at an equally rapid pace. Join us for an in-depth discussion on what this means for our industry as we know it!

Hanh N. Hong, M.Sc., P.Eng.



Hanh is a Senior Geotechnical Engineer – Edmonton Lead with AECOM. He has 23 years of experience planning, executing, and managing all phases of geotechnical engineering projects. His experience includes: project management, geohazard assessments, site inspections, managing/coordinating subsurface exploration, materials testing and inspection, geotechnical construction quality control and monitoring, geotechnical analysis, and report writing. Hanh is registered as a Professional Engineer in Canada (Alberta, British Columbia, Saskatchewan) and as a Professional Civil Engineer in the USA (California, North Dakota, and Texas).

Nathan Mayer, P.Eng.

Nate is a Professional Geomatics Engineer with a wide background in Remote Piloted Unmanned Aerial Systems (RPAS), remote sensing, conventional surveying and product development. Throughout his 10 years of geomatics experience Nate has contributed to project success in commercial construction, oil and gas, aerial & legal surveying, and R&D projects. Nate has worked for small start-ups and global corporations in Canada and Switzerland covering all aspects of remote sensing RPAS.



Steaphan MacAulay



Steaphan MacAulay is the Vice President of Transportation and Infrastructure at Global Raymac Surveys Inc. with more than 24 years of experience in the survey-related industry. His responsibilities throughout his career have included: managing construction site surveys, design review, personnel management, resource scheduling, cost controls, and corporate compliance.

Steaphan's employment history and experience have let him evolve into an expert when dealing with the Design Build method. This expertise includes direct interface with designers and engineers to resolve constructability and design issues and the ability to interact with and effectively solve construction layout issues for the contractor. His leadership, ability to problem-solve both efficiently and effectively, and his strong communication skills have made him an indispensable resource on each project he is involved in.

3:00 PM - 4:30 PM

Continuously Improving You and Your Organization

YP Host: Michael D'Souza

This workshop will focus on two related topics: 1) goal setting for yourself and your organization and 2) feedback loops. In the first half, we will explore examples of Big Audacious Goals for yourself and your organization. What is worthy of your time and attention? And then we will break these down into bite-sized SMART goals. And we'll discuss tips to help when you are stuck. In the second half, we will discuss feedback. How do you know you and your organization are on track or need redirection? We will discuss how to build the giving and receiving of regular, timely, and constructive feedback into your schedule.

Dr. Lianne Lefsrud, Ph.D., P.Eng.

Dr. Lianne Lefsrud, P.Eng. is the Risk, Innovation and Sustainability Chair (RISC) and Associate Professor, Department of Chemical and Materials Engineering, University of Alberta. Her research asks: How can risk management systems be enhanced so organizations are better equipped to recognize, understand, and respond to unforeseen events and manage the risks? For this, she uses theories of organizational change, process safety, and risk management. Over the past eight years, as a PI or co-PI, she has received over \$8.6 million in research funding and supervised 62 PDFs, PhDs, Masters, and undergrad students – many of whom have won awards and scholarships including Fulbright and Aga Khan. Professionally, her career spans two decades with senior roles in industry, consulting, and regulation. Before joining UofA, she was with the Erb Institute of Global Sustainable Enterprise at the University of Michigan. She obtained her PhD in Strategic Management and Organization, MSc in Environmental Engineering and Sociology, and BSc in Civil Engineering.



4:30 PM

Closing Remarks

Ryan Betker, CEA President

YP Host: Brett Kruger



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Thank you to this year's committee for their assistance with the program content!

